

130 North Duke Street
York, Pennsylvania 17401
(717) 771-4481
September 25, 1984

Mr. Donald C. Waddell
340 Hunterstown Road
Gettysburg, PA 17325

Re: Water Investigation
Hunterstown Road Area
Straban Township
Adams County

Dear Mr. Waddell:

On August 14, 1984 a representative from this Department sampled your well water supply as part of a groundwater investigation in your area. The following volatile organic chemicals were detected in your sample:

<u>Chemical</u>	<u>Quantity (parts per billion-ppb)</u>
1,1-Dichloroethane	4.7
1,1,1-Trichloroethane	24.0
Tetrachloroethylene	Less than 1.0

The water was also tested for pesticides and PCB's which were not detected in your sample.

The volatile organic chemicals are common industrial solvents with widespread applications. Some of these chemicals have been found to increase the risk of cancer in laboratory animals, although a similar correlation in humans has not been definitely established in the parts per billion range. Others have either not been subjected to extensive research testing or testing has not associated them with cancer production. Based on this testing evidence, 1,1,1-Trichloroethane is regarded as a suspected carcinogen. It is for this reason that the term "safe level" is inappropriate. Instead of safe levels, the term "level of risk" is associated with a specific amount of the contaminant. The Environmental Protection Agency (EPA) has determined that an adult drinking about two quarts of water every day for 70 years with a 1,1,1-Trichloroethane level of 21.7 ppb is exposed to an additional cancer risk level of one in one million (1:1,000,000).

Options available to you to reduce the level of volatiles in your water supply include:

- 1) Use of water from another source, such as public water;
- 2) Use of bottled water;
- 3) Boiling the water for ten (10) minutes;
- 4) Home treatment using granular activated carbon filtration units, which are available commercially. Preferred installation is two carbon filters in series (one after the

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other) placed in the drinking water line with a tap between the units for sampling. Monitoring must be performed periodically to check the removal efficiencies. Once breakthrough is established from the first filter, exchange the second unit for the first and replace the carbon media in the first filter. This will allow the second unit to maintain the highest quality carbon. Filters must be sized properly to handle the rate of water flow in your system.

Please keep in mind that since conditions may change, these recommendations pertain only to the August 14, 1984 sample results.

Should you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Kenneth L. Malik
Sanitarian

KLM:jdm

cc: Harrisburg Regional Office
Bureau of Solid Waste Management
Bruce Molholt, EPA

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